

GEOM. CH. 8.5 p. 435

TOTAL - 7 POINTS

#2

(1p)

GIVEN:  $R = 7 \text{ cm}$

FIND:  $A - ?$

$$A = \pi R^2 = \pi \cdot 7^2 = \pi \cdot 49 = \underline{49\pi \text{ cm}^2}$$

#6

GIVEN:  $A = 0.785 \text{ m}^2$

(3p)

FIND:  $R - ?$

$$A = \pi R^2; R^2 = \frac{A}{\pi} \quad R = \sqrt{\frac{A}{\pi}}$$

$$R = \sqrt{\frac{0.785}{3.14}} = \sqrt{0.25} = \underline{0.5 \text{ m}}$$

#8

GIVEN:  $C = 314 \text{ m}$

(3p)

FIND:  $A - ?$

$$C = 2\pi R \quad R = \frac{C}{2\pi} = \frac{314}{2 \cdot 3.14} = 50 \text{ m}$$

$$A = \pi R^2 = 3.14 \cdot 50^2 = 7850 \text{ m}^2$$